

CLAIMS

What is claimed is:

1. A video/audio data recording/reproducing apparatus, comprising:
a single chip controller controlling processing by at least two various function units as a digital camcorder, a digital still camera, a video recorder/reproducer, a data storage, an MP3 player and a voice recorder; and
a micro-compact hard disc drive as a main data recording medium storing data of the various function units.
2. The apparatus of claim 1, wherein the controller comprises:
a system bus;
a multiplexer/system resource controller in communication with the system bus and outputting image signals;
a motion picture experts group 4 compressor/decompressor in communication with the system bus and compressing/decompressing data of the function units;
a data recording medium interface in communication with the system bus and reading/writing data from/to a memory unit and the micro-compact hard disc drive;
a universal serial bus interface in communication with the system bus and receiving/transmitting the data of the function units;
a video processor in communication with the system bus and processing image signals input through the digital camcorder and still camera function units or input through an input terminal;
an audio encoder/decoder in communication with the system bus and processing input/output audio signals for the MP3 player and the voice recorder; and
a central processing unit controlling the controller via the system bus.
3. The apparatus of claim 1, further comprising a mode shifting switch selecting the function units.
4. The apparatus of claim 1, further comprising a transient integrated circuit interfacing the micro-compact hard-disk drive with the controller.

5. The apparatus of claim 1, further comprising:
a body including the single chip controller and the micro-compact hard disk drive; and
a station communicatively receiving the body and providing a plurality of
transmission/reception terminals allowing data transmission/reception between the body and
external computing devices.
6. The apparatus of claim 5, wherein the station and the body are communicatively
connected via a connection terminal in the station and the body, respectively.
7. The apparatus of claim 5, wherein the station comprises manipulation buttons
controlling the function units while the body is seated on the station.
8. The apparatus of claim 5, wherein the body further comprises a battery and the
station recharges the battery power from an external power supply while the body is seated on
the station.
9. The apparatus of claim 5, wherein the station comprises an SVHS, an AV, and a
video line input as the transmission/reception terminals.
10. The apparatus of claim 5, wherein the station comprises a signal reception unit
receiving operations signals from a remote controller to control the function units while the body
is seated on the station.
11. The apparatus of claim 5, further comprising a removable storage, wherein the
body further comprises a window to check the removable storage connection.
12. The apparatus of claim 1, further comprising a video line input, wherein the
controller receives image signals from the video line input, digitizes and compresses the image
signals and stores the image signals in the micro-compact hard disc drive, thereby providing a
video recorder as one of the various function units.

13. The apparatus of claim 12, further comprising a display unit displaying an image, wherein the controller reads the image signals from the micro-compact hard disc drive, decompresses the read image signals and outputs the decompressed image signals to the display unit for displaying, thereby providing a video reproducer as another function unit.

14. A video/audio data recording/reproducing apparatus, comprising:
a first housing having a receiving area facing inside of the apparatus and accommodating a hard disc drive and a circuit board;
a second housing in a parallel relation facing the receiving area of the first housing; and
a middle housing having a camera zoom button housing and supported in between the first and second housings to support a camera unit at a horizontal axial line of the camera zoom button housing in between the first and second housings.

15. The apparatus of claim 14, wherein the first and second housings each comprises an integral casing area covering the camera unit supported by the middle housing.

16. The apparatus of claim 15, wherein the integral casing areas are concave.

17. The apparatus of claim 16, wherein the camera zoom button housing is round and accommodated by the concave integral casing areas.

18. The apparatus of claim 14, wherein the second housing has a receiving area facing outside of the apparatus to receive a battery.

19. The apparatus of claim 14, wherein the middle housing has a through opening to receive therein the circuit board.

20. The apparatus of claim 18, further comprising a cover removably mounted on the second housing receiving area.

21. The apparatus of claim 14,
wherein the middle housing is rectangular having two vertical side surfaces and at least one bottom horizontal surface and a through opening, and
wherein increasing a width of the vertical and horizontal surfaces increases in the apparatus an interior receiving area comprising the first housing receiving area and the opening of the middle housing.

22. A video/audio data recording/reproducing apparatus, comprising:
a first housing having a receiving area facing inside of the apparatus and accommodating a hard disc drive;
a second housing in a parallel relation facing the receiving area of the first housing and having a receiving area facing outside of the apparatus and accommodating a removable battery; and
a middle housing having a camera zoom button housing and accommodating a circuit board, and supported in between the first and second housings to support a camera unit at a horizontal axial line of the zoom button housing in between the first and second housings.